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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22897 7590 09/21/2009

DEMONT & BREYER, LLC  
100 COMMONS WAY, Ste. 250  
HOLMDEL, NJ 07733

EXAMINER

MUSSELMAN, TIMOTHY A

ART UNIT

PAPER NUMBER

3715

DATE MAILED: 09/21/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,017	03/23/2004	David Feygin	115-001US	4800

TITLE OF INVENTION: VASCULAR-ACCESS SIMULATION SYSTEM WITH SKIN-INTERACTION FEATURES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/21/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - FEE(S) TRANSMITTAL

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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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22897      7590      09/21/2009

**DEMONT & BREYER, LLC**  
**100 COMMONS WAY, Ste. 250**  
**HOLMDEL, NJ 07733**

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### Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the **Mail Stop ISSUE FEE** address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,017	03/23/2004	David Feygin	115-001US	4800

TITLE OF INVENTION: VASCULAR-ACCESS SIMULATION SYSTEM WITH SKIN-INTERACTION FEATURES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/21/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
MUSSELMAN, TIMOTHY A	3715	434-262000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

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2 \_\_\_\_\_  
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted:

Issue Fee  
 Publication Fee (No small entity discount permitted)  
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4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  
 b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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22897	7590	09/21/2009	EXAMINER	
DEMONT & BREYER, LLC 100 COMMONS WAY, Ste. 250 HOLMDEL, NJ 07733				MUSSELMAN, TIMOTHY A
ART UNIT		PAPER NUMBER		
3715				DATE MAILED: 09/21/2009

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 837 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 837 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/807,017	FEYGIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	TIMOTHY MUSSELMAN	3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 4/27/2009.
2.  The allowed claim(s) is/are 39-41,47-51,58-62,65-66,71-72 (renumbered as claims 1-17).
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

/XUAN M. THAI/  
Supervisory Patent Examiner, Art Unit 3715

**EXAMINERS AMENDMENT**

An examiners amendment to the record appears below. Should the changes be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone discussion with Mr. Wayne Breyer on August 25<sup>th</sup>, 2009. Support for the changes are found in paragraphs 0068-0080 of the original specification. The changes are to claim distinguishing features over the prior art, and also to fix minor grammatical and typographical errors.

The application has been amended as follows:

**IN THE CLAIMS:**

In claim 39, line 6, replace "(c) the palpation module generates a magnetic force that opposes downward motion of the pseudo vein; and (d) when the user applies a sufficient amount of force to the pseudo vein, the pseudo vein cannot be felt." with  
-- (c) the palpation module comprises a first magnetic-field generating element and a second magnetic field generating element, wherein the first and second magnetic-field generating elements are operated so that an interaction of the magnetic fields

generated therefrom is repulsive; and (d) the repulsive interaction is experienced by the user as a force that opposes downward motion of the pseudo vein. --

In claim 47, line 6, replace “ the second plate, wherein the second plate is disposed above said fist plate in a", with -- wherein the second plate is disposed above said first plate in a --

In claim 47, line 9, replace “an arrangement for generating a magnetic force, wherein: (a) the arrangement is operatively coupled to the second plate; and (b) the magnetic force opposes a force that is applied to the pseudo vein by a user.” with -- an arrangement for generating a first magnetic field, wherein: (a) the arrangement is operatively coupled to the second plate; and (b) the first magnetic field interacts with a second magnetic field, wherein the interaction is experienced by a user as a force that opposes a force that is applied to the pseudo vein by a user.--

In claim 48, line 2, replace "position of pseudo vein" with -- position of the pseudo vein --

In claim 50, line 1, replace “wherein a magnitude of the magnetic force is adjustable.”, with -- wherein a magnitude of the first magnetic field is adjustable. --

Claim 57 (cancelled).

In Claim 58, line 1, replace "The apparatus of claim 57" with -- the apparatus of claim 39 further comprising a rigid pseudo vein."--.

In claim 59, line 1, replace "The apparatus of claim 57" with -- the apparatus of claim 39 further comprising a rigid pseudo vein, --

In claim 60, line 1, replace "The apparatus of claim 57 wherein the palpation module generates a magnetic force that opposes downward motion of the pseudo vein." with -- The apparatus of claim 39 further comprising a rigid pseudo vein, wherein the palpation module is arranged so that: (a) the rigid pseudo vein moves downward in response to applied pressure by the user; and (b) when the user applies a sufficient amount of force to the pseudo vein, the pseudo vein cannot be felt. --

In claim 61, line 4, replace "palpation module: (a) is disposed beneath the pseudo skin; and (b) comprises a pseudo vein that moves downward in response to applied pressure, wherein when the user applies a sufficient amount of force to the pseudo vein, the pseudo vein cannot be felt.", with -- palpation module is disposed beneath the pseudo skin and further wherein: (a) the palpation module comprises a permanent magnet; (b) the palpation module comprises a coil that is energizable via a current to generate a first variable-strength magnetic field; and (c) the palpation module is

arranged so that the pseudo vein can be rendered discernable or not discernable by feel to the user as a function of the current applied to the coil.--

In claim 62, line 1, replace "The apparatus of claim 61 wherein the palpation module controllably obscures the pseudo vein under the pseudo skin such that the pseudo vein can be felt, or not felt, as desired.", with -- An apparatus comprising: Pseudo skin; and a palpation module for enabling a user to palpate a pseudo vein, wherein said palpation module is disposed beneath the pseudo skin and further wherein: (a) the palpation module comprises a permanent magnet having a fixed strength magnetic field; (b) the palpation module comprises a coil that is energizable via a current to generate a variable-strength magnetic field; and (c) the palpation module is arranged so that an interaction of the fixed strength magnetic field and the variable-strength magnetic field is repulsive and is experienced by the user as a force opposing downward movement of the pseudo vein. --

In claim 65, line 1, replace "The apparatus of claim 61 wherein the palpation module generates a force that opposes downward motion of the pseudo vein, which is experienced by the user as a substantially constant force opposing downward movement of the pseudo vein.", with -- The apparatus of claim 62 wherein the force experienced by the user is substantially constant during application.--

In claim 66, line 1, replace "The apparatus of claim 65 wherein, although constant during application, the force generated by the palpation module is adjustable.", with:

-- An apparatus comprising: Pseudo skin; and a palpation module for enabling a user to palpate a rigid pseudo vein, wherein said palpation module is disposed beneath the pseudo skin and further wherein the palpation module: (a) comprises a permanent magnet having a fixed strength magnetic field; (b) comprises a coil that is energizable via a current to generate a variable-strength magnetic field; and (c) is arranged so that the perceived stiffness of the rigid pseudo vein is alterable by adjusting the current applied to the coil. --

Claims 67-69 (cancelled).

In claim 71, line 2, replace "magnetic force" with – repulsive interaction --

In claim 72, line 2, replace "the magnitude of the magnetic force", with – the magnitude of the repulsive interaction --

#### **REASONS FOR ALLOWANCE**

The following is a statement of the examiners statement for reasons for allowance:

Patentability is seen in, although not limited to, independent claims 39, 47, and 62, because the prior art does not teach or suggest a palpation module wherein the user

experiences an opposition to applied pressure to a pseudo vein, wherein the opposition is generated by the interaction of magnetic fields.

Patentability is seen in, although not limited to, independent claim 61, because the prior art does not teach or suggest a palpation module wherein a pseudo vein beneath a pseudo skin is controllably obscured as a function of current applied to a coil which varies the strength of a magnetic field.

Patentability is seen in, although not limited to, independent claim 66, because the prior art does not teach or suggest a palpation module wherein a pseudo vein beneath a pseudo skin has a stiffness which is controllable as a function of current applied to a coil which varies the strength of a magnetic field.

The prior art teaches of palpation modules which include vascular passages. For example, Cunningham et al. (US 6,470,302) and Iade et al. (US 2,704,897). However, the prior art does not disclose or suggest the use of magnetic fields to control the tactile interaction of the simulated vascular passageways.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY MUSSELMAN whose telephone number is (571)272-1814. The examiner can normally be reached on Mon-Thu 6:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571)272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. M./  
Examiner of Art Unit 3715

/XUAN M. THAI/  
Supervisory Patent Examiner, Art Unit 3715